

ABB BALDOR RELIANCE III

Customer information packet

EM7056T-C

20//15HP, 1770//1470RPM, 3PH, 60//50HZ, 256T

Class - CLI GP C,D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	256T
Frame Material	Iron
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP C,D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	15.000 HP @ 50 HZ 20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 380.0 V @ 50 HZ 230.0 V @ 60 HZ 190.0 V @ 50 HZ
Agency Approvals	CSA UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	52.000 A @ 208.0 V 48.000 A @ 230.0 V 44.000 A @ 190.0 V 24.000 A @ 460.0 V 22.000 A @ 380.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	J
Type	AC
Mech. spec.	09F101
Base	
Status	INA/A
Elec. spec.	09WGT459
Layout	09LYF101
Eff. date	03-09-2021
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	11-20-2017

Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T4
Heater Indicator	No Heater
High Voltage Full Load Amps	22.0 a
Insulation Class	B
Inverter Code	Not Inverter
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X0960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.50 IN
Power Factor	83
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible

Shaft Slinger Indicator	No Slinger
Speed	1470 rpm 1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP0978XPSL											
NO.								CC	010A		
SER.								TEMP CODE		T4	
SPEC.	09F101T459G1										
CAT.NO.											
HP	20//15										
VOLTS	230/460//190/380										
AMPS	48/24//44/22										
RPM	1770//1470					MOTOR WEIGHT			339		
HERTZ	60//50		PH	3	CL	B	DE BRG	6309			
SER.F.	1.00		DES	A	CODE	J	ODE BRG			6208	
FRAME	256T		GREASE			POLYREX EM					
RATING	40C AMB-CONT										
NEMA-NOM-EFF	93		PF	83							

AC Induction Motor Performance Data

Record # 68005

Typical performance - not guaranteed values

Winding: 09WGT459-R006				Type: 0960M		Enclosure: XPFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		20//15		Full Load Torque		59.27 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		48/24//44/22		Breakdown Torque		232 LB-FT	
R.P.M.		1770//1470		Pull-up Torque		126 LB-FT	
Hz		60//50		Phase		3	
NEMA Design Code		A		KVA Code		J	
Service Factor (S.F.)		1		No-load Current		10.4 A	
NEMA Nom. Eff.		93		Power Factor		83	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		58°C	
				Locked-rotor Power Factor		26.5	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	45	67	78	83	86	87
Efficiency	89.2	93	93.7	93.6	93.1	92.4
Speed	1793.2	1786.4	1779.1	1771.9	1763.7	1755.3
Line amperes	11.8	15	19.2	24	29.3	34.9

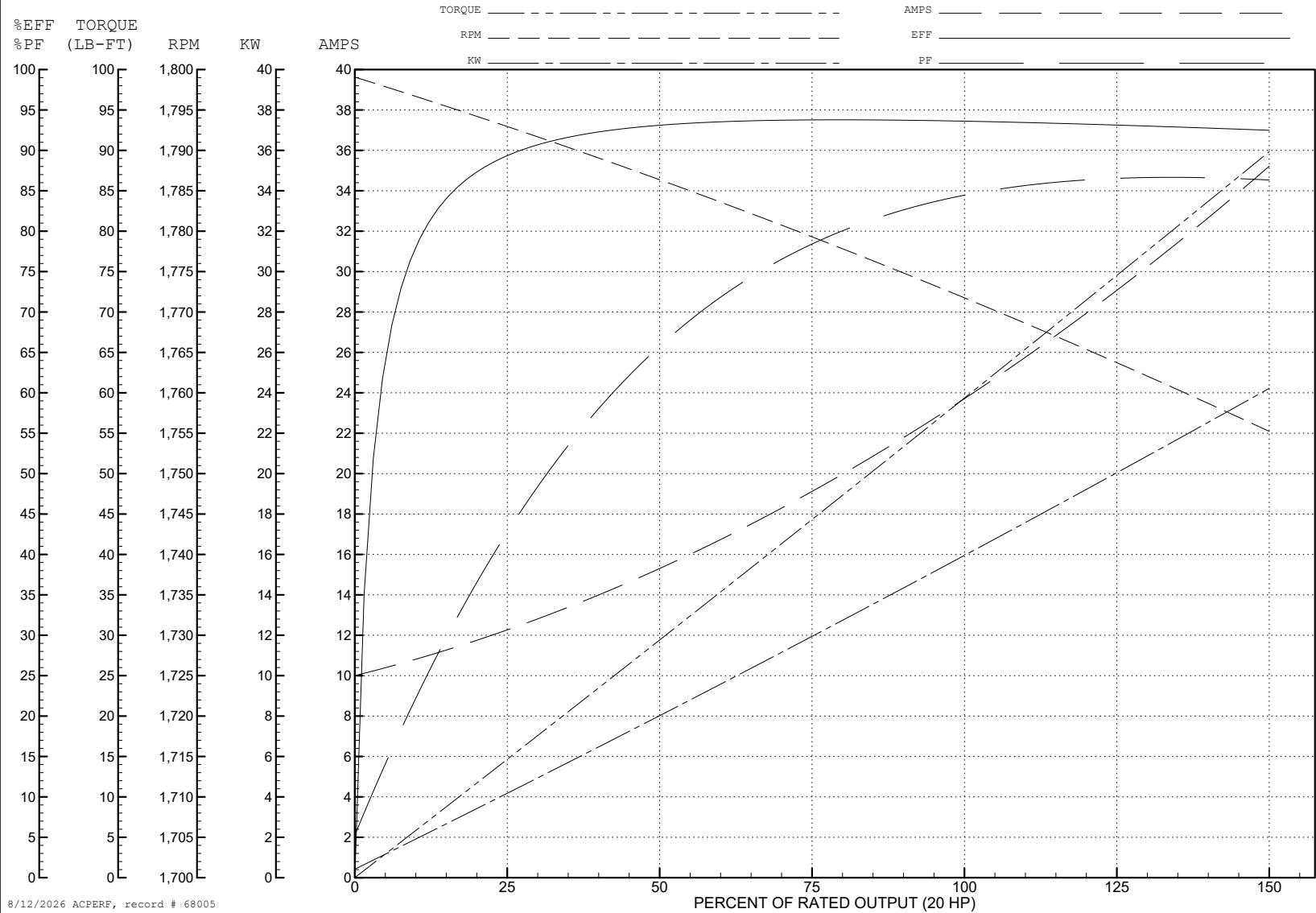
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WINDING # 09WGT459

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1771.9 RPM 460 V 0960M

TORQUES (LB-FT): PO=232 PU=126 LR=141 LRA=198



AC Induction Motor Performance Data

Record # 68007

Typical performance - not guaranteed values

Winding: 09WGT459-R006				Type: 0960M		Enclosure: XPFC	
Nameplate Data				380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		20//15		Full Load Torque		53.45 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		48/24//44/22		Breakdown Torque		224 LB-FT	
R.P.M.		1770//1470		Pull-up Torque		131 LB-FT	
Hz		60//50		Phase		3	
NEMA Design Code		A		KVA Code		J	
Service Factor (S.F.)		1		No-load Current		10.16 A	
NEMA Nom. Eff.		93		Power Factor		83	
Rating - Duty		40C		AMB-CONT			
				Temp. Rise @ Rated Load		50°C	
				Locked-rotor Power Factor		29.3	
				Rotor inertia		2.65 LB-FT ²	

Load Characteristics 380 V, 50 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	43	66	77	83	86	87
Efficiency	88	92.2	93.1	93.1	92.5	91.8
Speed	1494	1488	1481	1475	1467	1460
Line amperes	11.32	14.06	17.76	22.07	26.82	31.83

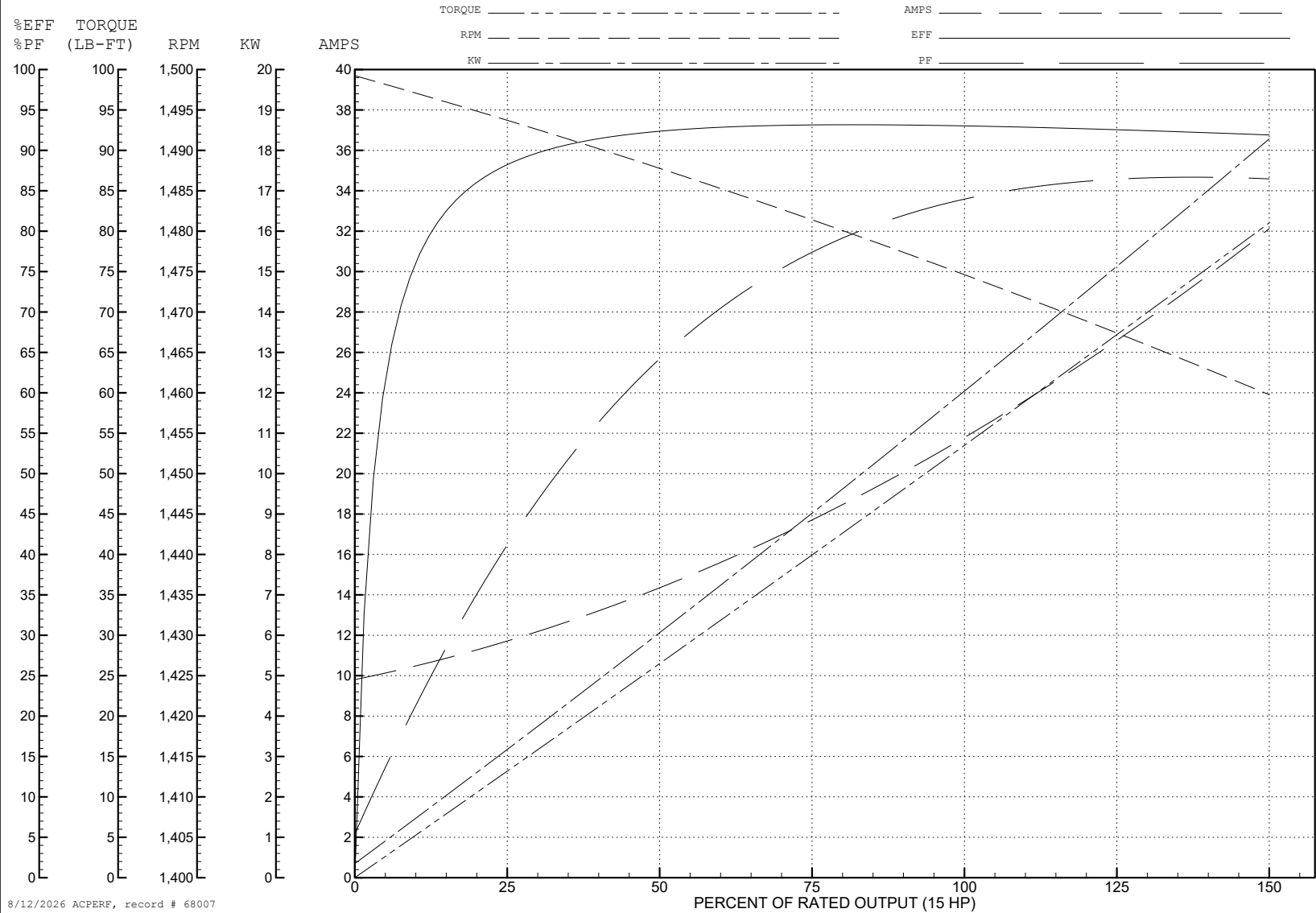
ABB Motors and Mechanical Inc.

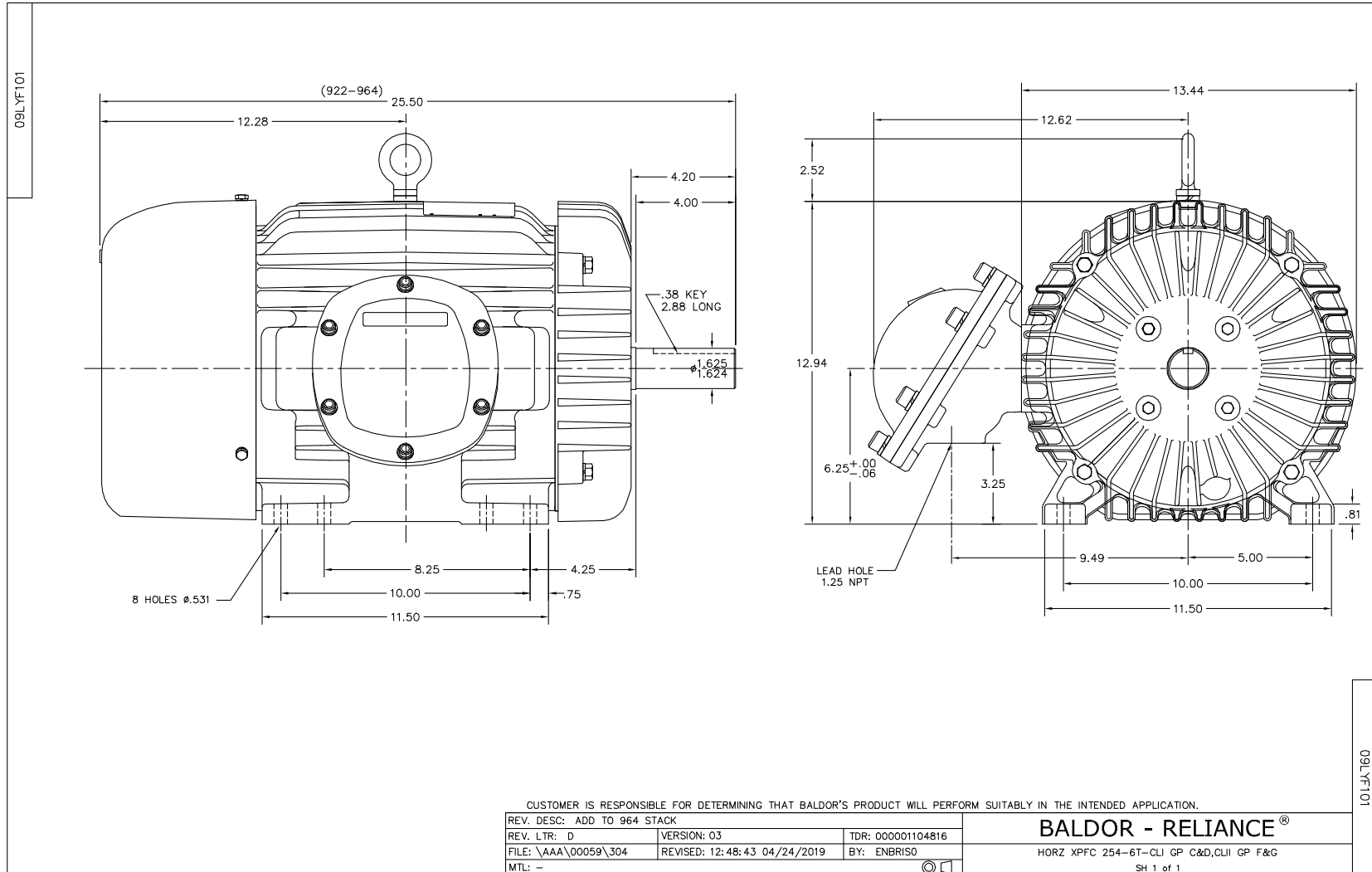
WINDING # 09WGT459

Typical performance - not guaranteed values.

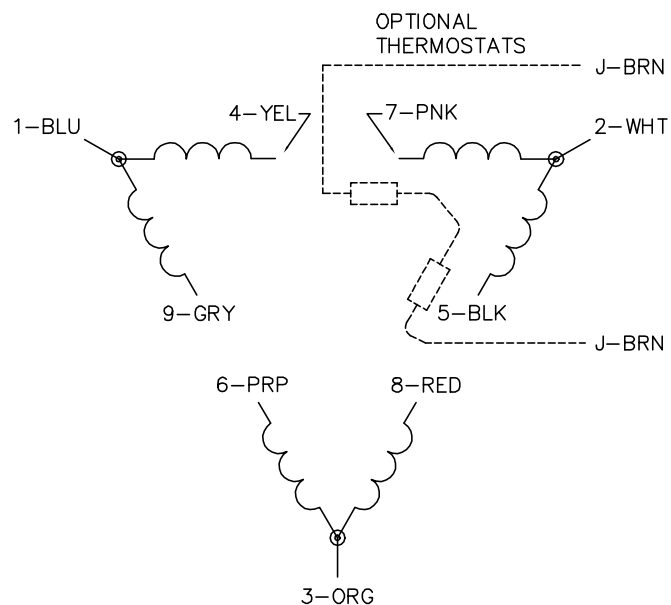
15 HP 3 PH 50 HZ 1475 RPM 380 V 0960M

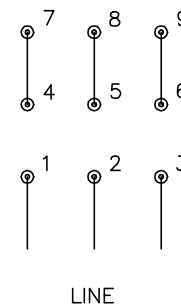
TORQUES (LB-FT): PO=224 PU=131 LR=146 LRA=193





CD0180


 LOW VOLTAGE
(2D)

 HIGH VOLTAGE
(1D)

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: -


BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1